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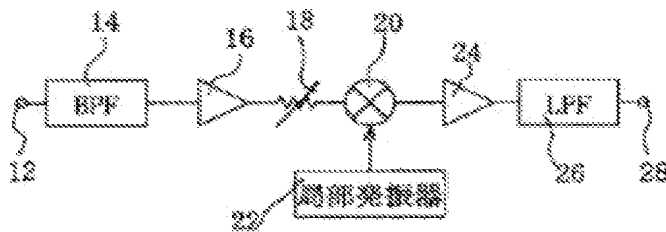
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Abstract:

PROBLEM TO BE SOLVED: To provide a community reception system that frequency-converts a satellite digital broadcast signal into a frequency band that can be received by a television receiver at a low cost.
SOLUTION: The community reception system supplies converted plural satellite digital broadcast signals, which are frequency-converted so that the satellite digital broadcast signals in a 1st frequency band are respectively arranged within a 2nd frequency band lower than the 1st frequency band at a prescribed frequency interval, to one mixer 20 via a transmission channel. The mixer 20 is provided with a local oscillator 22 whose frequency of its local oscillation signal is selected so that the mixer 20 can convert the frequency of the converted satellite digital broadcast signals in a way that each converted signal is placed within the 2nd frequency band by the supply of the local oscillation signal by the local oscillator 22 to the mixer 20.



JPO Machine translation abstract:

(57) **Abstract**

SUBJECT Frequency conversion of the digital-satellite-broadcasting signal is carried out to a frequency band receivable with a television set by low cost.

Means for Solution Two or more digital-satellite-broadcasting signals of each in the 1st frequency band so that it may be located at intervals of fixed frequency in the 2nd frequency band lower than the 1st frequency band, Two or more conversion digital-satellite-broadcasting signals which carried out frequency conversion are supplied to the one mixer 20 via a transmission line of a community reception system. The local oscillator 22 supplies a local oscillation signal to the mixer 20, and one set of a local oscillator in which frequency of said local oscillation signal is chosen is provided so that two or more conversion digital-satellite-broadcasting signals may be changed into the mixer 20 by each signal in a frequency conversion ***** frequency band.

Claim(s)

Claim 1 Two or more digital-satellite-broadcasting signals of each in a frequency band appointed beforehand so that it may be located at intervals of fixed frequency in a frequency band lower than said frequency band, One mixer by which a block signal which consists of two or more conversion digital-satellite-broadcasting signals which carried out frequency conversion is supplied via a transmission line of a community reception system, A power converter for community reception system terminals which possesses one set of a local oscillator in which frequency of said local oscillation signal is chosen so that a local oscillation signal may be supplied to this mixer and said block signal may be changed into each signal in said frequency band from said mixer.

Claim 2 In the power converter for community reception system terminals according to claim 1, said local oscillator, A power converter for community reception system terminals into which frequency of a local oscillation signal is changed so that said block signal may be changed into them by each signal in said frequency band appointed beforehand, even if frequency bands of said block signal are any of two or more frequency bands.

Claim 3 It is provided in a head end connected to an end of a transmission line and this transmission line, Two or more digital-satellite-broadcasting signals in the 1st frequency band it was transmitted from a broadcasting satellite and defined beforehand so that it may be located **in / it is lower than said 1st frequency band, and / said transmission line** at intervals of fixed frequency in the 2nd frequency band that can be transmitted, A frequency conversion means which outputs two or more conversion digital-satellite-broadcasting signals which carried out frequency conversion to said transmission line, From said transmission line, provide a power converter with which said two or more conversion digital-satellite-broadcasting signals are supplied, and this power converter, So that a local oscillation signal may be supplied to one mixer which carries out frequency conversion of said two or more conversion digital-satellite-broadcasting signals, and this mixer and said two or more conversion digital-satellite-broadcasting signals may be changed into a signal in said 1st frequency band, A community reception system provided with one set of a local oscillator in which frequency of said local oscillation signal is chosen.

Claim 4 In the community reception system according to claim 3, said local oscillator, A community reception system into which frequency of a local oscillation signal is changed so that said each conversion digital-satellite-broadcasting signal may be changed into it by each signal in the 1st frequency band, even if the 2nd frequency band is beforehand chosen among two or more frequency bands.

Claim 5. Received a digital-satellite-broadcasting signal of two or more channels, and carried out frequency conversion of the 1st intermediate frequency signal of digital satellite broadcasting of two or more channels that carried out frequency conversion. The 2nd intermediate frequency signal of digital satellite broadcasting of two or more channels that is a frequency band lower than said 1st intermediate frequency signal which can be transmitted in a transmission line of a community reception system, and adjoins mutually is supplied, The 2nd intermediate frequency signal of digital satellite broadcasting of two or more of these channels with one local oscillation signal. One mixer which carries out frequency conversion to the 3rd intermediate frequency signal of digital satellite broadcasting of two or more channels, A power converter for terminals chosen so that one set of a local oscillator which supplies said local oscillation signal to said mixer may be provided and frequency of said local oscillation signal may be located in an upper part frequency band in a frequency band with which said 1st intermediate frequency signal is included for said 3rd intermediate frequency signal.

Claim 6 In the power converter for terminals according to claim 5, said 1st intermediate frequency signal of digital satellite broadcasting of two or more channels, a part of total n of a satellite analog of two or more channels, and the 1st intermediate frequency signal of digital broadcasting -- occupying m ($n \geq m$) -- said -- the 2nd intermediate frequency signal of digital satellite broadcasting of a channel two or more, Have the same frequency interval as a satellite analog of two or more channels, and the 1st intermediate frequency signal of digital broadcasting between adjoining things, and said 3rd intermediate frequency signal of digital satellite broadcasting of two or more channels, A power converter for terminals used as the same frequency band as m channels which face to a low frequency band from a channel of a maximum frequency belt among said satellite analog and the 1st intermediate frequency signal of digital broadcasting.

Claim 7 Receive a digital-satellite-broadcasting signal of two or more channels, and the 1st intermediate frequency signal of digital satellite broadcasting of two or more channels that carried out frequency conversion, Rather than these, with a low frequency band And a head end provided with a frequency conversion means which carries out frequency conversion to the 2nd intermediate frequency signal of digital satellite broadcasting of two or more channels with which each frequency band adjoins mutually, Said transmission line which was supplied from said head end and which transmits two or more 2nd intermediate frequency signal of digital satellite broadcasting of a channel, Said 2nd intermediate frequency signal of digital satellite broadcasting of two or more channels is supplied from this transmission line, One mixer which carries out frequency conversion of the 2nd intermediate frequency signal of digital satellite broadcasting of two or more of these channels to the 3rd intermediate frequency signal of digital satellite broadcasting of two or more channels with a local oscillation signal, A community reception system chosen so that one set of a local oscillator which supplies said local oscillation signal to this mixer may be provided and frequency of said local oscillation signal may be located in an upper part frequency band in a frequency band with which said 1st intermediate frequency signal is included for said 3rd intermediate frequency signal.

Claim 8 In the community reception system according to claim 7, said 1st intermediate frequency signal of digital satellite broadcasting of two or more channels, a part of total n of a satellite analog of two or more channels, and the 1st intermediate frequency signal of digital broadcasting -- occupying m ($n \geq m$) -- said -- the 2nd intermediate frequency signal of digital satellite broadcasting of a channel two or more, Have the same frequency interval as an analog of two or more channels, and the 1st intermediate frequency signal of digital satellite broadcasting between adjoining things, and said 3rd intermediate frequency signal of digital satellite broadcasting of two or more channels, A community reception system used as the same frequency band as m channels which face to a low frequency band from a channel of a maximum frequency belt among said satellite analog and the 1st intermediate frequency signal of digital broadcasting.